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Lipid droplet staining

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An abbreviated version of this protocol was published in eLIFE in Sep 2021

Drosophila STING protein has a role in lipid metabolism

DOI: 10.7554/eLife.67358

Detailed protocol

For Nile Red staining, adult fat bodies and guts were dissected in PBS, fixed in 4% paraformaldehyde for 20 minutes, washed twice with PBS and mounted in fresh Nile Red solution with DAPI (0.5 mg/ml Nile Red (ThermoFisher, cat N1142) stock solution diluted 1000x with PBS supplemented with 30% glycerol). Fo LipidTox staining, adult fat bodies were dissected in PBS, fixed in 4% paraformaldehyde for 20 minutes, washed once with PBST and twice with PBS and stained with 50x dilution of HCS LipidToxTM Green (ThermoFisher, cat. H34475) in PBS. After LipidTox staining, fat bodies were washed with PBS, staine with DAPI and mounted in Fluoromount-G (SouthernBiotech, cat. 0100-01). Images were collected using Olympus Fluoview FV3000. Quantification of surface area occupied by lipid droplets was performed using cellSens Dimension Desktop (Olympus).

How to cite:（Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used）

1. Akhmetova, K. and Chesnokov, I. (2022). Lipid droplet staining. Bio-protocol Preprint. bio-protocol.org/prep1744.
2. Akhmetova, K., Balasov, M. and Chesnokov, I.(2021). *Drosophila* STING protein has a role in lipid metabolism. eLIFE. DOI: 10.7554/eLife.67358

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